UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,990	03/29/2001	Isao Minematsu	57454-060	3710

7590   07/25/2007

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ART UNIT	PAPER NUMBER
2183	

MAIL DATE	DELIVERY MODE
07/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	**Applicant(s)**
Office Action Summary	09/819,990	MINEMATSU, ISAO
	Examiner	**Art Unit**	
	Daniel Pan	2183	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>16 May 2007</u>.

2a)☒ This action is **FINAL.** 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

    4a) Of the above claim(s) <u>11-14</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

1.   Claims 1-10 remain for examination. Claims 11-14 have been canceled
(correction included).

The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and
using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or
with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by
the inventor of carrying out his invention.

2.   Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to
comply with the written description requirement. The claim(s) contains subject matter
which was not described in the specification in such a way as to reasonably convey to
one skilled in the relevant art that the inventor(s), at the time the application was filed,
had possession of the claimed invention.

3.   As to the applicant's remark that pop and pop ra in fig.9 is a single instruction
code and has only a single operation code, the pop instruction has   only one
operation. No description of the data transfer between the registers and memory
corresponding to the single instruction code having single operating code can be found
in the specification. Although the pop is a single operation code, it has no data transfer
between the registers and the data transfer between one of the registers and memory
based on a single pop. Therefore, it raised a doubt as whether applicant had
possession of the clamed subject matter at the time of the filing.

4.   Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to
comply with the enablement requirement. The Claim(s) contains subject matter which
was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant's specification, page 12, lines 3-12, fig.9A, taught a single instruction code POP instruction with two operational codes (pop(1)with no register and pop(2) with a register as shown in fig.9A). However, claim 1 is directed to the data-transfers in correspondence to single instruction code having a single operation code (see claim 1, lines 7-9).

5.   As to applicant's remarks regarding the pop and pop ra as single operation code, it only has the data transfer between registers, not data transfer between one of the registers and the memory. No teaching of how the data transfer is implemented between registers and data transfer between one of the registers and memory corresponding to the single instruction code having single operation code can be found in the specification Therefore, the enablement is not satisfactorily resolved, and consequently raised a doubt as to the enablement (see 858 F.2d 731,737 8 USPQ2d 1400, 1404 (Fed. Cir. 1998), see also MPEP 21654.01,2164.04).

6.   Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Col et al. (6,349,383) in view of volentine et al. (6,363,473).

7.   Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandavilli (6,546,480) in view of Morrison et al. (5,918,031).

8.   The rejections are maintained and incorporated by reference the last Office action on 11/17/06.

The response filed 05/16/07 by applicant has been fully considered but is not persuasive.

9.   In the remarks, applicant argued that :

a) the claimed invention requires both data transfers to be performed in correspondence to the same instruction code;

b) Morrison disclosed a data transfer between a register and memory in response to a single instruction code, and Mandavilli disclosed a data transfer between registers in response to another instruction code.

10.   As to a) applicant is reminded that applicant is reminded that unclaimed features

cannot be used to overcome the prior art (e.g. see <u>CCPA In re Lundenberg & Zuschlag</u>,

113, USPQ 530, 534 (1957)). For example, applicant only claimed "an instruction code"

(claim 1, line 2) and single said instruction code (claim 1, line 9), not the same

instruction code. Therefore, single said instruction code could be the instruction code

not necessarily the same instruction code. Nevertheless, let's assume it is the same

instruction code, Col disclosed a data transfer between registers and memory in

response to one instruction code, and Volentine taught a data transfer between

registers in response to another instruction code (see [SPUSH MACRO REG1] in

co1.11, lines 10-25) having a single operation code [SPUSH] for transferring between

registers (see the move of content of REG1 to bp register in co1.11, line 15, see also 8

[314]). Col did not specifically show the data transfer between registers as claimed.

However, it would have been obvious to one of ordinary skill in the art to use Volentine

in Col for including the data transfer between registers as claimed because the use of

Volentine could provide Col the capability to generate more than one operations in a

single predefined instruction code, therefore, reducing the overall latency of the complex

instructions, and therefore, provided a solution to a particular problem, and it could be

achieved by predefining the Volentine's single instruction for transfer between the

registers into the configuration file of Col with modified system parameters (e.g. the

instruction type, code length) so that the specific transfer instruction of Volentine could

be recognized by Col, and because Col also taught that the future improvement was to

include a microinstruction which directed the microprocessor to access a single cache

line during a single instruction cycle to access multiple prescribed data entities (see

col.21, lines 40-46), which was a suggestion of the applicability of the data transfer

between registers and a memory in addition to the data transfer between the registers

in a single instruction, in doing so, provided a motivation.

11.   Furthermore, since applicant did not claim the specific format or the structure of

the single instruction code, examiner hold that one of ordinary skill in the at art should

be able to recognize the advantage of using a single instruction code in general for

multiple transfers in order minimize the hardware overheads. The question to be asked

is : "What is the uniqueness of multiple transfers (registers and register and memory)

based on a single instruction code in which no specific instruction format of the

single instruction code has been claimed ?"

12.   As to b), since applicant did not claim the format or the structure of the single

instruction code, examiner hold that one of ordinary skill in the at art should be able to

recognize the advantage of using a single instruction code for multiple transfers in

general in order minimize the hardware overheads. See also pages 7, 8 of the last office

action for reasons of obviousness.

      THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

      A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

21 Century Strategic Plan

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